

PART I Authorization to Operate

- A. The permittee is authorized to operate Class V Injection Wells, at the facility as described in the permit application and in the cover page of this permit, in accordance with the provisions set forth in this permit. In the case of this permit the Class V Injection Wells are those which are described in the permit application or approved by the Department.
- B. This permit and the authorization to inject shall remain in effect until the expiration date stated on the cover page of this permit. If the permittee desires to continue injection past the expiration date of this permit, the permittee shall request a permit reissuance at least 180 days prior to expiration of this permit.

PART II Construction Requirements

- A. Injection Well Requirements

The permittee shall inject only the microbial and nutrient solution described in the permit application.

- B. Modifications

Approval of the Alabama Department of Environmental Management (ADEM) shall be obtained prior to modification of any injection well or supporting surface. Modification shall mean any action that will change the configuration of the well beneath the surface, the methods of monitoring injection, or will result in injection of a fluid not specifically authorized by this permit.

PART III Monitoring and Operating Requirements

- A. Injection Fluid

The permittee shall not inject any substance that is defined as hazardous or toxic by Federal or State laws or regulations or any substance not identified in the application for this permit. The proposed use of substances other than those identified in the permit application must be reviewed and approved by the ADEM prior to use.

- B. Monitoring Wells

- 1. The permittee shall monitor the groundwater as specified in Appendix A of this permit.
- 2. The permittee shall not exceed the limits established in Appendix A of this permit.
- 3. The ADEM may change the sampling requirements if the sampling data indicates a need to do so. Approval to change the sampling frequency must be obtained prior to changing the frequency.

C. Operation

The injection wells operated under this permit shall function properly. Should the injection wells fail to function properly, the permittee shall take corrective action, to include cessation of injection, as required by ADEM.

PART IV Records, Reports, & Submittals

A. Records

1. The permittee shall retain all records concerning the data used to complete the permit application, the operation of the wells, and the nature and composition of pollutants injected; to include records of the calibration of instruments, meters and gauges, quality control records, and recordings from continuous monitoring instrumentation; until at least three years after the closure of wells.
2. When requested by ADEM, the permittee shall deliver copies of any of the records maintained in accordance with this permit.

B. Reports

1. The permittee shall submit a ground water monitoring report on a quarterly basis. The report shall include as a minimum:
 - a) The date, and exact place of sampling;
 - b) The complete chain of custody forms for all samples collected and
 - c) The results of each analysis performed.
2. The permittee shall submit groundwater monitoring reports required in Part IV B. 1. no later than 28 days after the reporting period.
3. The permittee shall report to ADEM any of the following:
 - a) Any planned action which will change the use of the injection wells, will result in injection of a fluid different from that authorized by this permit, will change the method of operations of any injection well, or will change the method of the monitoring of well operations or injected fluids.
 - b) Any planned transfer of ownership of all or part of the permitted facility.
 - c) Any relevant facts of which the permittee becomes aware which should have been submitted in a permit application and any corrections to data previously submitted in a permit application.

4. Other Submittals

Studies, engineering reports, plans and specifications, plugging and abandonment plans, logging reports, and other technical documents submitted to comply with this permit shall be prepared by or under the supervision of qualified persons defined by Rule 6-8-.13 of the UIC Regulations of the ADEM.

PART IV Plugging and Abandonment

The permittee shall perform any abandonment and closure actions that may be required by ADEM to remove a threat to groundwater quality or to the health of persons which is caused by the injection activity.

PART V Permit Modification, Revocation, Suspension, and Termination

- A. ADEM may impose emergency additional conditions to this permit when necessary to protect waters of the state from pollution. These conditions may include suspension of the permit to inject and shall remain in effect until the permit is modified, revoked, suspended or terminated in accordance with Rules 6-8-.12(a)3-5 and 6-8-.12(f) of the UIC Regulations of ADEM.
- B. Non-emergency permit modification, revocation, suspension, and termination actions shall be accomplished in accordance with ADEM Administrative Code Rule 335-6-8.

PART VI General Provisions

- A. The permittee shall comply with all provisions of the UIC Regulations of ADEM and shall comply with all provisions of this permit and shall reduce or halt injection if needed to maintain compliance with the permit and regulations.
- B. The permittee shall comply with all applicable Federal and State hazardous waste management regulations.
- C. The permittee shall allow members of the ADEM staff to:
 - 1. access property and records of the permittee for purposes of inspection.
 - 2. collect samples of the injected fluids, process and wastewater streams associated with the permitted injection wells.
 - 3. collect samples from any monitoring wells.
 - 4. obtain copies of records upon request.
- D. The permittee shall immediately take all reasonable steps to minimize or correct any adverse environmental impact resulting from the operation of the permitted injection wells.
- E. This permit does not convey any property rights of any sort, or any exclusive privilege.
- F. The filing of a request by the permittee for a permit modification, revocation, and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- G. Any noncompliance with this permit constitutes a violation of the Alabama Water Pollution Control Act and/or the Underground Injection Control Regulations and is grounds for enforcement action such as permit termination, revocation, modification; or denial of a permit renewal application.

APPENDIX A

Groundwater monitoring wells MW-10, MW-11, OBG-5R and OBG-3R shall be sampled and limited as specified below:

<u>GROUNDWATER CHARACTERISTICS</u>	<u>UNITS</u>	<u>MONITORING REQUIREMENTS</u>		<u>LIMIT</u>
		<u>SAMPLE TYPE</u>	<u>FREQUENCY</u>	
Phosphorous	mg/L	Grab	Quarterly	Monitor
pH	s.u.	Grab	Quarterly	6.5-8.5
Nitrate as N	mg/L	Grab	Quarterly	10
Copper	mg/L	Grab	Quarterly	1
Iron	mg/L	Grab	Quarterly	0.3*
Zinc	mg/L	Grab	Quarterly	5
Sulfate	mg/L	Grab	Quarterly	250

* Due to the fact that Iron can sometimes be naturally found in levels that exceed drinking water standards and since iron is not normally a severe health risk, the permit will allow the discharge to continue as long as the discharge does not cause a significant rise in levels above natural conditions.

ADEM Permit Rationale

Date: July 21, 2010

Prepared by: Joe Kelly

Permit Applicant Name: Crown Central, LLC –attention Robert Fritz, PO Box 1168, Baltimore, MD 21203.

Facility Name: Former Crown AL-34

Location: 1608 Bessemer Road
Birmingham
Jefferson County, Alabama
Lat: N 33.487500/W -86.889722
Town 18S, Range 3 W, Section 7

UIC Permit Number ALSI9937695

Draft Permit is: Initial Registration / New Use

Injection Description: injection of microbes and nutrient solution to aid in the remediation of existing petroleum contamination

Discussion: Standard permit drafted.

1. No hazardous injection
2. Groundwater limitations included
3. Sampling required
4. Groundwater limitations revised to include caveat related to background iron concentrations